UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,885	07/28/2003	Robert P. Enns	1014-072US01 / JNP-0323	3864

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ART UNIT	PAPER NUMBER
2161	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/628,885	ENNS ET AL.
	Examiner	Art Unit	
	Chelcie Daye	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>27 February 2007</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-4,6-24 and 26-55</u> is/are pending in the application.

    4a) Of the above claim(s) <u>16-18 and 36-55</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-4, 6-15, 19-24, 26-35</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

U.S. Patent and Trademark Office

PTOL-326 (Rev. 08-06)   Office Action Summary   Part of Paper No./Mail Date 20070508

DETAILED ACTION

1.   This action is issued in response to applicant's RCE filed February 27, 2007.

2.   Claims 1-55 are presented. No claims added and claims 5 and 25 are cancelled.

3.   Claims 16-18 and 36-55 remain withdrawn.

4.   Claims 1-4,6-15,19-24, and 26-35 are pending.

5.   Applicant's arguments filed January 29, 2007, have been fully considered but

they are not persuasive.

Continued Examination Under 37 CFR 1.114

6.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

February 27, 2007 has been entered.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

8.   Claims 1-3,6-11,15,22-24,26-31, and 35 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Valois (US Patent Application No. 20040260818) filed

June 23, 2003, in view of Delany (US Patent Application No. 20020156879) filed

November 30, 2001.

Regarding Claims 1 and 22, Valois discloses a method comprising:

storing authorization data that defines an access control attribute ([0058],

lines 4-10, Valois)[1] and an associated regular expression specifying a textual

pattern ([0057], lines 4-9, Valois). However, Valois is silent with respect to the

access control attribute is a coarse-grain access control attribute defining access

control rights for a resource provided by a device. On the other hand, Delany

discloses the access control attribute is a coarse-grain access control attribute

defining access control rights for a resource provided by a device ([0118],

Delany). Valois and Delany are analogous art because they are from the same

field of endeavor of relating to a system that provides authorization compliance

validation with a security policy. It would have been obvious to one of ordinary

skill in the art at the time of the invention to incorporate Delany's teachings into

the Valois system. A skilled artisan would have been motivated to combine in

order to achieve the level of detail at which the data would have been

considered. As a result, coarse-grain access provides higher performance

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[1] Examiner Notes: Authorization data corresponds to "references" and the definition is an attribute that is
part of the Access Control List (ACL).

through more optimized protocols and the data tends to work on contiguous regions at a time. Therefore, the combination of Valois in view of Delany, disclose receiving a command from a client, wherein the command requests access to configuration data for the resource of the device ([0159] and [0165], Delany); evaluating the command using the regular expression to determine whether the command matches the textual pattern ([0118], lines 19-26, Delany); and controlling access to the configuration data by the client based on the coarse-grain access control attribute and the evaluation of the regular expression ([0159], lines 1-10, Delany).

Regarding Claims 2 and 23, the combination of Valois in view of Delany, disclose a method wherein controlling access comprises

allowing access to the configuration data when the access control attribute denies access to the resource ([0067], lines 1-4, Valois) and the textual pattern of the regular expression matches the command ([0117], lines 18-20 and [0118], lines19-26, Delany).

Regarding Claims 3 and 24, the combination of Valois in view of Delany, disclose a method wherein controlling access comprises

denying access to the configuration data when the access control attribute grants access to the resource ([0067], lines 5-9, Valois) and the textual pattern of

the regular expression matches the command ([0117], lines 18-20 and [0118],

lines19-26, Delany).

Regarding Claims 6 and 26, the combination of Valois in view of Delany,

disclose a method wherein the coarse-grain access control attribute comprises a

set of permission bits, and each of the permission bits is associated with a

respective group of the resources ([0161], lines 3-5, Delany).

Regarding Claims 7 and 27, the combination of Valois in view of Delany,

disclose a method further comprising receiving the command from the client via a

command line interface ([0199], lines 2-11, Delany)[2].

Regarding Claims 8 and 28, the combination of Valois in view of Delany,

disclose a method wherein evaluating the command comprises evaluating the

command in real-time ([0383], lines 9-14, Delany) while the client inputs the

command via the command line interface ([0199], lines 2-11, Delany).

Regarding Claims 9 and 29, the combination of Valois in view of Delany,

disclose a method wherein the configuration data is arranged in the form of a

multi-level configuration hierarchy having a plurality of objects (Fig.5, [0142],

lines 1-2, Delany), and each of the objects represents a portion of the

configuration data that relates to one or more resources of the device ([0142],

lines 2-5, Delany).

Regarding Claims 10 and 30, the combination of Valois in view of Delany,

disclose a method wherein the objects have respective textual labels ([0143],

lines 1-4, Delany) and the regular expression defines the textual pattern to match

the textual labels ([0057], lines 4-9, Valois) of a set of one or more of the objects

within the configuration hierarchy (Fig.5, Delany).

Regarding Claims 11 and 31, the combination of Valois in view of Delany,

disclose a method wherein evaluating the command comprises applying the

regular expression to the command ([0099], lines 1-7, Valois) to determine

whether the command specifies any of the objects within the set ([0142], lines 2-

5, Delany).

Regarding Claims 15 and 35, the combination of Valois in view of Delany,

disclose a method wherein controlling access comprises controlling access to

configuration data of a router ([0053], lines 6-10, Valois).

9.   **Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over**

Valois (US Patent Publication No. 2004/0260818) filed June 23, 2003, as applied to

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[2] Examiner Notes: Receiving the command from a client corresponds to "a user can request..." and the

claims 1-3,15,22-24, and 35 above, and further in view of Mitra (US Patent No.

6,973,460) filed November 26, 2002.

Regarding Claim 4, Valois discloses a method for storing authorization

data ([0058], lines 4-10, Valois). However, Valois does not explicitly disclose

storing the authorization data as a class that conforms to a class syntax. On the

other hand, Mitra discloses storing the authorization data as a class that

conforms to a class syntax (column 8, lines 7-18, Mitra). It would have been

obvious to one of ordinary skill in the art at the time of the invention to

incorporate Mitra's teaching into the Valois system. A skilled artisan would have

been motivated to combine the two references as suggested by Mitra (column 7,

lines 48-52), in order for the classes to be annotated such that, at run-time,

useful information about how the data is organized for each of the various ways

of storing the data (i.e. configuration) may be extracted from the annotations. As

a result, this allows for various services to perform operations in accordance with

the information.

10.   Claims 12-14,19-21, and 32-34 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Valois (US Patent Publication No. 2004/0260818) June 23, 2003,

in view of Delany (US Patent Publication No. 2002/0156879) filed November 30,

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interface corresponds to "GUI".

2001, and further in view of Nelson (US Patent No. 6,243,713) filed August 24,

1998.

Regarding Claims 12 and 32, the combination of Valois in view of Delany,

disclose a method further comprising to automatically insert one or more meta-

characters into the regular expression ([0451-0453], lines 1-7, Delany) based on

the hierarchical arrangement of the configuration data (Fig.5, Delany). However,

Valois in view of Delany, do not explicitly disclose pre-processing the regular

expression. On the other hand, Nelson discloses pre-processing the regular

expression (column 10, lines 39-50, Nelson). It would have been obvious to one

of ordinary skill in the art at the time of the invention to incorporate Nelson's

teachings into the Valois in view of Delany system. A skilled artisan would have

been motivated to combine the two references as suggested by Nelson (column

9, lines 60-65), in order to convert component data into a list of distinctive objects

that represent the original data of the component, this is understood to perform

data reduction. Pre-processing remove any non-essential information that does

not substantially add to the quality of the system. As a result, pre-processing

saves the system time and space for capacity.

Regarding Claims 13 and 33, the combination of Valois in view of Delany and further in view of Nelson, discloses a method further comprising:

pre-processing the regular expression (column 10, lines 39-50, Nelson) so that the command is evaluated with the regular expression in real-time ([0383], lines 9-14, Delany) as the client enters the command ([0199], lines 2-11, Delany).

Regarding Claims 14 and 34, the combination of Valois in view of Delany and further in view of Nelson, discloses a method wherein evaluating the command comprises evaluating the command with the pre-processed regular expression each time the client enters a token indicating a textual break within the command (column 17, lines 35-40, Nelson).

Regarding Claim 19, the combination of Valois in view of Delany and further in view of Nelson, discloses a method comprising:

receiving input ([0056], lines 3-7, Valois) defining an access control attribute ([0058], lines 4-10, Valois) and an associated regular expression that specifies a textual pattern ([0057], lines 4-9, Valois);

pre-processing the regular expression (column 10, lines 39-50, Nelson) to automatically insert one or more meta-characters into the regular expression ([0451-0453], lines 1-7, Delany);

evaluating a command in real-time using the regular expression ([0383],

lines 9-14, Delany) as a client enters the command via a command line interface

([0199], lines 2-11, Delany); and

controlling access to configuration data of a device based on the

evaluation ([0066], lines 1-9, Valois).

Regarding Claim 20, the combination of Valois in view of Delany and

further in view of Nelson, discloses a method further comprising storing the

configuration data in the form of a multi-level configuration hierarchy having a

plurality of objects (Fig.5, [0142], lines 1-2, Delany), wherein pre-processing the

regular expression comprises automatically inserting one or more meta-

characters into the regular expression ([0451-0453], lines 1-7, Delany) based on

the hierarchical arrangement of the configuration data (Fig.5, Delany).

Regarding Claim 21, the combination of Valois in view of Delany and

further in view of Nelson, discloses a method wherein the regular expression

defines a textual pattern that identifies one or more of the objects within the

configuration hierarchy, and evaluating the command comprises:

applying the regular expression in real-time ([0383], lines 9-14, Delany) to

determine whether a portion of the command that has been entered by the client

matches the textual pattern ([0064], lines 1-5,Valois); and

selectively allowing the client to complete the command based on the determination ([0199], lines 2-11, Delany).

Response to Arguments

Applicant's arguments with respect to newly amended claim1 and claim 19 have been considered but are moot in view of the new ground(s) of rejection.
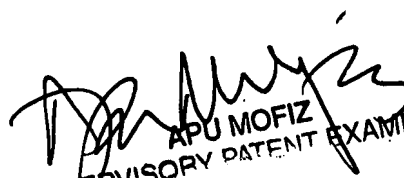
Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chelcie Daye whose telephone number is 571-272-3891. The examiner can normally be reached on M-F, 7:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chelcie Daye
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May 9, 2007